

CLAIMS

1. A telecommunications transport network comprising: a plurality of network elements each having a performance monitoring facility operative to report overall error rate at the element in each network path using the element, and one or more management systems operative to calculate performance of a segment of a path between two network elements, from the reported overall error rates at the elements.

2. A network as claimed in claim 1, in which a facility is provided to record a maximum error rate, for a given segment of a path for which segment performance is calculated, and including a facility for issuing an alarm if the calculated error rate is closer to the recorded maximum error rate than a predetermined amount.

3. The network of claim 1, wherein said one or more management systems are operative to subtract a total error rate reported by a first network element from a total error rate reported by a second network element to thereby provide an error rate attributable to particular network domain.

4. A method of operating a telecommunications transport network comprising a plurality of network elements each having a performance monitoring facility, the method comprising:

reporting overall error rate at the element in a network path using the element, and

calculating performance of a segment of a path between two network elements, from the reported overall error rates at the elements.

5 5. A method as claimed in claim 3, including recording a maximum error rate, for a given segment of a path for which segment performance is calculated, and issuing an alarm and/or switching the path between the elements, if the calculated error rate is closer to the recorded maximum error rate than a predetermined amount.

6. The method of claim 4, wherein said step of calculating includes the step of subtracting a total error rate reported by a first network element from a total error rate reported by a second network element to thereby provide an error rate attributable to particular network domain.

10 7. An apparatus for providing performance monitoring of a telecommunications transport network comprising:

a performance monitoring facility coupled to designated network elements, said performance monitoring facility operative to report overall error rate at the element in each network path using the element, and

15 one or more management systems operative to calculate performance of a segment of a path between two network elements, from the reported overall error rates at the elements.

8. The apparatus of claim 7, wherein said one or more management systems are operative to subtract a total error rate reported by a first network element from a total error rate reported by a second network element to thereby provide an error rate attributable to particular network domain.

20 9. The apparatus of claim 8, wherein said network management systems include an element management system which couples to a network management system.

10. The apparatus of Claim 8, further including a TCM emulation device coupled to said one or more management systems.